

## Original Article

# Perianal multiple Bowen's disease: a case report

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**Abstract:** Bowen's disease, also known as an intraepithelial squamous cell neoplasia, is a carcinoma in situ firstly reported in 1912 by a dermatologist named Bowen from the United States [1]. About 3%~5% of Bowen's disease might develop into invasive squamous cell carcinomas of mucosa and skin [2]. Surgical resection is preferred because of its low recurrence. Here we reported a rare Bowen's disease case presented with multiple perianal lesions that were given surgical resection, but relapsed after 2 years.

**Keywords:** Bowen's disease, perianal, multiple

### Introduction

A 54-year-old woman had small perianal mass accompanied with itching for more than 6 years. Knee-chest position rectal examination found genital leukoplakia and four irregular masses at anal 3, 5-7, and 12 point with the size of 0.5 cm × 0.5 cm, 1.0 cm × 1.0 cm and 1.5 cm × 1.3 cm, 0.8 cm × 1.0 cm respectively. The edge of mass was pink, eczema-like changes on its surface, a sense of touch itching associated with pain and no bleeding. Mass at 5-7 point was surgically removed and the pathology revealed anal Bowen's disease. An anal biopsy for the lesion at 12 point was performed and the pathology was the same result. Then the lesion at anal 3 and 12 points were surgically removed (**Figure 1**).

Two years after operation, it was found that there are 3 taupe banded lesions at 12 point (**Figure 2**). The lesion was about 0.1 cm × 1.0 cm. The pathology of biopsy showed the recurrence. The patient was given resection after biopsy.

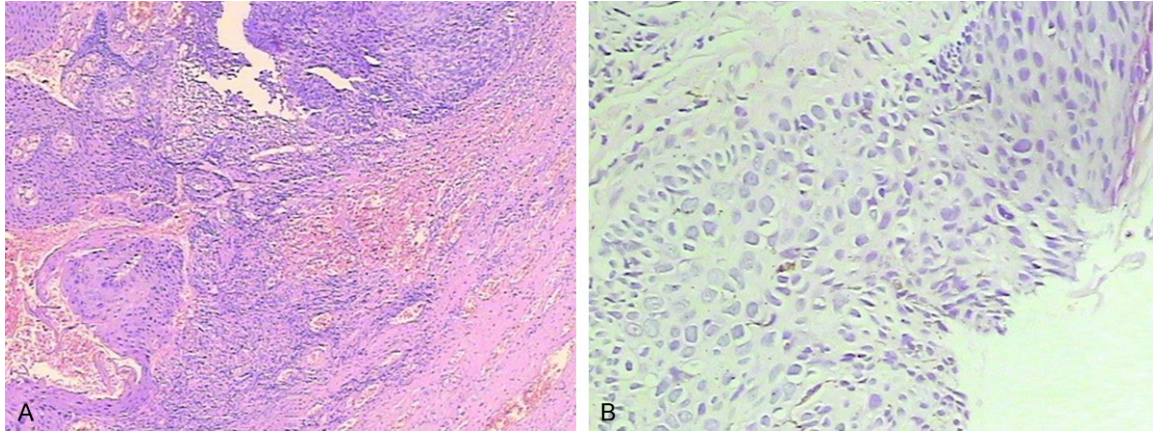
### Discussion

Bowen's disease was previously described as related with multiple factors including ionizing radiation, sun exposure, arsenic exposure [3],

immunosuppression [4], human papilloma virus infection [5] genetic factors, trauma, chemical carcinogens, X-ray radiation. Bowen's disease can occur in any age, most in the 20-45 years old, male and female incidence rate is almost equal [6]. In female patients, it is also associated with vulvar and cervical intraepithelial neoplasia [7]. As for this patient, she reported a history of squamous cell cancer of the uterus. Perianal Bowen's disease is characterized by infrequent, mild clinical manifestations, such as burning or itching [8], perianal lump or bleeding in more than a third of patients [9], and shows perianal rash-like appearance.

The diagnosis of Bowen's disease depends on pathology [10]. A therapeutic regimen has not been recommended [11]. Resection was the preferred treatment. It is required to remove the whole lesion even to the edge of the healthy tissue so as to reduce the recurrence rate [12]. Recently multiple treatment modes are applied including Imiquimod [13], fluorouracil for external use [14], laser therapy, radiotherapy and photodynamic therapy [2]. Among these, Radiotherapy was reported to be suitable for larger lesions and recurrent lesions [11]. Photodynamic therapy is a non-invasive method, while it may cause treatment failure especially in older patients and the lesions with severe atypia [16]. In this patient, the recur-

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**Figure 1.** Pathological changes of the surgically removed tissue. A: It was showed as epithelial hyperplasia, loss of polarity of epithelium, and cell atypia while still limited within the epithelial (HE  $\times$  40). B: It was showed as dysplastic epithelial cells occupied the whole floor, a large stained mitosis, and cell atypia limited within the epithelium (HE  $\times$  400).



**Figure 2.** Gross appearance of the recurrent lesion.

rence after surgery was probably related with the residual of operation.

### Disclosure of conflict of interest

None.

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